Congress of the United States House of Representatives

Washington, DC 20515-3218

The Honorable Andrew M. Cuomo Governor of New York State NYS State Capitol Building Albany, NY 12224

March 7, 2013

Dear Governor Cuomo:

I write to thank you for your leadership and steady hand during this very difficult recovery process for victims of Superstorm Sandy. For this recovery, I ask for your support of the projects listed below which are critically important to the people of the Hudson Valley.

Local stakeholders identified these projects as priorities. The projects address critical and unmet needs resulting from Superstorm Sandy and Hurricane Irene, and protect and prepare our region against future storm damage. They are listed by county and then in order by amount requested.

I want to highlight one project in particular. While gathering this information, one project was repeatedly identified by municipal and county officials, business leaders, environmental leaders, and farmers across the region as being of critical importance: flood mitigation of the Wallkill River. In 2011, Wallkill flooding caused nearly \$81,000,000 in damages in Orange County alone. With proper and timely action, future flooding can be prevented.

Thank you for your consideration of these very important projects. Should you need any additional information, please do not he sitate to contact me.

Sincerely.

Sean Patrick Maloney Member of Congress

ORANGE COUNTY

1. Wallkill River Flood Prevention and Mitigation, \$40,000,000 See Attached

2. Woodbury Waste Water Treatment Facility, \$6,000,000

The nearly 40 year-old facility serves 165 homes. During severe storms the facility has been completely overwhelmed, spilling waste water into Woodbury creek, which flows into the Moodna Water Basin, and then the Hudson River. The project would replace the outdated facility.

3. Orange County Government Center, (\$3,700,000); Orange County Court House Repairs, (\$157,000); Orange County Building Repairs (\$92,000); Orange County Annex Building, (\$54,500)

These buildings suffered significant damage during Hurricanes Irene and Lee, and the County has been unable to afford permanent repairs, leaving the structures vulnerable to additional damage in the event of severe weather.

- 4. Village of Warwick, Upper Reservoir Dam Spillway and Dam System Upgrades, \$2,500,000 Establishes a second spillway for Upper Reservoir Dam and make improvements to the Upper Reservoir intake basin facilities (headworks) to mitigate overtopping of the dam, which has occurred in recent storms. Overtopping could lead to dam failure, and even forced local officials to evacuate Town due to concerns of dam failure. This project will also make spillway improvements to the Middle Reservoir Dam to ensure the integrity of that structure. This entire project is designed to address the integrity of these two dams and address concerns of NYSDEC regarding a cascade effects of a failure at either the Upper Dam or Middle Dam, or even at both dams simultaneously, on the Lower Reservoir Dam which is a high hazard dam and to which improvements have already been made.
- 5. City of Newburgh Quassaick Creek Stream Corridor Restoration, \$2,500,000

 The Quassaick Creek is a tributary of the Hudson River. During flooding conditions, volume increases dramatically, flooding some residential and commercial areas. The project would widen and reinforce the corridor to reduce damage.
- 6. Village of Florida, Glenmere Lake Spillway Replacement, \$2,250,000

 The 324-acre reservoir, Glenmere Lake, is located between the Village of Florida, Town of Warwick, and Town of Chester. It is also the sole source of drinking water for the Village of Florida and parts of the Town of Goshen. This replacement is needed to ensure the integrity of the dam and the continuing existence of this vital drinking water source.

7. Cornwall Wastewater Treatment Plant, \$2,200,000

Cornwall is looking for funds to refurbish their wastewater treatment plant, which was completely underwater during Hurricane Irene. They have put roughly \$1,000,000 into repairs to keep it functioning and avoid any inflow into the Hudson River, but given the age of the plant it is difficult to keep it in compliance with environmental standards and NYSDEC is threatening action. They are seeking \$2.2 million in order to make sufficient upgrades for compliance with NYSDEC standards.

8. Orange County Forge Hill Bridge, \$2,000,000

The bridge, which was destroyed by Irene and Sandy, links critical state, federal, and local roads. Because of the damage, traffic has been diverted onto much smaller roads that are unable to handle the high volume. If left unrepaired, the bridge is vulnerable to future storm damage that may render

it unsalvageable.

9. Village of Maybrook, Sewer Treatment Plant, \$2,000,000

This is an extremely old and outdated plant in wetland-like environment that cannot handle another Irene-like flood without significant discharge.

10. City of Newburgh, Washington Lake Mitigation/Flood Control, \$2,000,000

Principle source of drinking water for City of Newburgh, and future source (2014) for the Town of Newburgh as well as the Town of New Windsor. Flood control/mitigation would prevent flooding conditions downstream.

11. City of Middletown, Monhagen Drainage Way, \$1,719,188

This drainage way was damaged in Hurricane Irene. This funding would remove debris and make restorations to bring functionality of the drainage way to pre-storm conditions.

12. Town of New Windsor, Waste Water Treatment Plant and Effluent Line, \$865,886.46

The waste water treatment plant services approximately 7,000 customers and is in serious need of permanent repairs. The plant is unable to satisfactorily process waste water in the event of severe weather and the effluent line is incapable of handling even slight increases in volume of water. Recent snow melts have caused treated water to blow through manholes along the line. Request would restore plant to pre-storm function (\$413,157.46) and repair the effluent line (\$452,729.00).

13. City of Newburgh Water Transition Main Protection, \$750,000

Water main has 6-10 Crossing of the Quassaick Creek. Crossing results in a higher level of erosion damage. In the event of flooding, risk of damage and obstruction increases dramatically, placing the city water supply in serious jeopardy.

14. Town of Warwick, Buttermilk Falls Bridge, \$600,000

Replacement of this bridge that has been completely destroyed by Irene, Lee, and Sandy. The bridge is now impassable and significantly diminishes public safety for approximately 65 residences along the 3.5- mile road that the bridge serves.

15. Orange County Algonquin Middle Dam, (\$355,500) and Orange County Algonquin Upper Dam, (\$153,400)

These two dams, damaged during Irene, Lee, and Sandy storms, are in desperate need of repair to continue functioning adequately.

16. Town of Deerpark, Big Pond Culvert, \$400,000

The Town of Deerpark has replaced this culvert three times in the last 10 years. After Hurricane Irene washed the culvert out, the Town conducted a hydraulic study that concluded that the culvert must be widened to 36 feet to handle another "100-year storm". NYSDEC has mandated that this study be used when replacing the culvert.

17. City of Newburgh Sewage Treatment Plant – Relocation of the Electrical Generator, \$200,000 During Sandy, a tidal surge overtook designated area for the city's DEC/FEMA required electrical generator. The Electrical generator must be relocated to take it out of tidal surge area.

18. City of Newburgh Chadwick Lake Green Sand Filtration, \$200,000

The Green Sand Filtration plant was designed to remove manganese at Chadwick Lake and was completed just before Irene and Lee. It was contaminated during the storms and is still not functioning. Over 6,000 homes and businesses rely on this for water supply.

- 19. Town of New Windsor, Upper Moodna Creek, Exposed Sewer Main, \$150,000 The sewer main in New Windsor was exposed in recent severe weather, making the system
 - significantly more vulnerable to erosion and breakage.
- 20. Town of Goshen, Repair/Replace Culvert in Black Dirt Region, \$126,000

Culvert damaged in Irene and needs to be repaired or replaced. There is a serious risk of significant damage to farm/commercial property if the culvert is not addressed.

21. Town of Deerpark City Buildings, \$83, 161

The cost would cover repairs to Deerpark buildings that were damaged in Superstorm Sandy, including replacing the roof of the Highway Department garage (\$44,812), the Police Department (\$10,749) and repairing damaged walls in Town Hall (\$21,600).

22. Orange Regional Medical Center, \$81,000

Funds would be used for a facility to house their emergency preparedness equipment. Currently the medical center is keeping emergency supplies off-site in several different facilities, dramatically slowing response time and efficiency.

23. Blooming Grove Bridges (Lakeshore Rd. Bridge and Glenwood Rd Bridge), \$70,000 Needs assistance in replacing two bridges destroyed in recent storms. Since the destruction of the bridges, the town has been forced to use insufficient temporary bridges — bridges that cannot accommodate emergency vehicles, forcing them to make a costly 3.5-mile detour. FEMA grants are expected to cover roughly 75-85% of costs, but the town is still anticipating roughly a \$60,000-\$70,000 cost.

WESTCHESTER COUNTY

1. Town of Bedford, Storm water Mitigation, \$5,000,000

The Bedford/Katonah drainage system collects storm water from the majority of the hamlet and carries a substantial volume of runoff under the Metro North Railroad and into the Muscoot River. The system is currently incapable of handling increased water volume, resulting in massive flooding in downtown Katonah. The scope of the project would include replacing the culvert under the Metro North Railroad with a larger culvert, improving the large drainage system throughout the hamlet that feeds the culvert, and improving the stream capacity between the culvert and the Muscoot River.

2. Town of North Salem, Sunset Ridge Drainage, \$2,600,000

Storms Irene, Lee, and Sandy caused this drainage system to fail. The Town has already spent \$330,000 to make repairs and improvements. The storm water overwhelmed the aging system of basins and pipes. Basins eroded causing pipes to collapse, creating sink holes on the surface and caused severe silting and phosphorus loading (a pollutant of concern) to the NYC drinking water reservoir system that exists in the Town of North Salem. Open swales have been gouged and water is running down through homes in larger storms. The project would remedy this situation by fixing basins and collapsed piping, as well as retrench and rebuild swales. Preliminary engineering work has been done.

3. Town of Somers, Restoration of Pond, \$2,000,000

Restoration of stormwater retention area for flood mitigation including rebuilding the dam that previously held back the water.

4. Town of North Salem, North Salem (CFFD) Firehouse, \$500,000

Caused by Irene and worsened by Lee and Sandy, the swollen Titicus River took out a large section of bank that supported an area of the firehouse making the site significantly less stable. NYC DEP has given permission to do this work.

5. Town of Pound Ridge, Regional Emergency Shelter, \$350,000

Driveway and parking area to serve Community Center and Regional Emergency Shelter.

6. Town of Lewisboro, Truesdale Lake Dam, \$300,000

Dam needs significant repair. Dam holds back all water in Lake Truesdale in South Salem and supports a roadway above. Engineering already exists for this project.

7. Town of Lewisboro, Truesdale Settling Pond, \$300,000

Dredge and refurbish settling pond to the east of Lake Truesdale off Boway. Engineering exists for this project.

8. Town of Pound Ridge, Fire Department Water Supply Restoration, \$200,000

Restoration and dredging of two existing ponds to unclog dry hydrants that provide critical water supply for fire department.

9. Town of North Salem, Fox Den Lake Hawthorne Drainage, \$110,000

Many of the same issues exist here as detailed in Sunset Ridge project above, causing the system to fail and damage Lake Hawthorne. Engineering, survey work, and bid documents for this project have been completed.

10. Town of Somers, Lake Lincolndale Project, \$50,000

Sediment removal and redefinition of the stream channel in the area of Florence Drive to

accommodate flow from Lake Lincolndale.

11. Town of Lewisboro, Elmwood Road Culvert, \$42,000

Culvert at Elmwood Road near Wakeman Road intersection. During severe rainstorms the volume of water is too great for the culvert resulting in property destruction. Cost estimates for enabling a larger flow, replacing the guardrails, and repaving the road are \$30,000, \$7,000 and \$5,000 respectively for a total of \$42,000. Engineering exists for this project.

PUTNAM COUNTY

1. Putnam County, Communication Tower for First Responders, \$5,000,000

Establish a communications tower for first responders to ensure increased and improved communications among first responders in the event of an emergency and enable greater interoperability among responders.

2. Putnam County, Dam Hardening, \$3,000,000

Make improvements to dams throughout Putnam County to ensure the structural integrity of those dams and reduce the risk of dam failure and flooding.

3. Putnam County, Hazardous Tree Removal & Trimming (150 miles), \$3,000,000

Reduce the severity of, and mitigate against, power outages from downed trees and limbs on power lines throughout Putnam County.

4. Town of Southeast, Peach Lake Stream Dredging, \$1,500,000

Alleviate flooding that is occurring more frequently with greater damage in the Town of Southeast in Putnam County and the Town of North Salem in Westchester County. Will require DEC, DEP, and USACE involvement.

5. Putnam County, Water Districts, Power Generation, \$1,000,000

Make improvements to water districts throughout Putnam to ensure delivery of water supply in the event of power outage.

6. Putnam County, Sewer Plant Hardening, \$1,000,000

Improvements to sewer treatment facilities throughout Putnam County to ensure the safe and continuous operation of the facilities and prevent against any discharge of untreated effluent into various water bodies or drainage systems particularly those that provide drinking water to New York City and the communities of Putnam County

7. Putnam County, Critical IT Hardening, \$1,000,000

Ensure continued operation of critical IT systems such as GIS during power outage, provide greater backup capability of data, and assist in the provision of more effective and efficient emergency operations.

8. Village of Brewster, Tonetta Brook Field Prevent Culvert Replacement, \$960,000

Replace existing culvert with one sized to handle current flood flows; eliminate the threat of flooding; and prevent damage to water main, sewer line, and gas line that run above the culvert and under the roadway on top of the culvert and infrastructure. This is also important to prevent the water line from being ruptured and draining the village's water supply storage tank, prevent the sewer line from rupturing and discharging into the NYC Drinking Water Supply, or a rupture of the gas line, which could result in an explosion.

9. Village of Brewster, Wellfield Power Supply Reconfiguration & Upgrade, \$730,000

The water system supplies drinking water to 3,000 customers in the Village of Brewster and Town of Southeast. This project will eliminate the possibility of interruption of water supply during power outage and flood.

10. Town of Kent, Lake Carmel Dam \$725,000

Requesting short-term improvements to address erosion on dam embankment and downhill side of spillway channel to stabilize the situation so that it does not continue to worsen as well as long-term

improvements to repair/replace the horizontal crack that runs the length of the concrete spillway cap and rehabilitate/replace the structurally questionable gatehouse on Lake Carmel Dam. Preliminary engineering exists.

11. Town of Southeast, Maple Road, \$500,000

Repeatedly flooded by storms; replace 3' round deteriorating steel pipe and crumbling headwalls with large concrete box culvert, new headwalls, and repair road above.

12. Town of Southeast, Brewster Hill Road at Durkin Farm, \$500,000

Repeatedly flooded by storms; replace pipe that replaced undersized bridge with large concrete box culvert, new headwalls, and repair road above.

13. Town of Southeast, Welfare Road, \$350,000

Repeatedly flooded by storms; replace 5' round deteriorating steel pipe and cracked headwalls with large concrete box culvert, new headwalls, and repair road above.

14. Putnam County, Dam Relief Valves, \$300,000

Install relief valves at 6 dams to relieve pressure on dams during storms and ensure the continued structural integrity of those dams.

15. Town of Patterson, Putnam Lake Dam, \$275,000

The dam impounds water for a 226-acre lake, and has been the subject of a number of analyses -- Army Corps of Engineers (1978), Dam Break & Inundation Study (2009), and Engineering Assessment Report (2012) as required by NYSDEC Dam Safety Regulations. Steps to mitigate deficiencies have been identified -- a new emergency spillway, strengthening of face to prevent further wear and degradation of the dam, and inspection and overhaul of "sluice-gate" outlet structure.

16. Mahopac Public Library, Emergency Generator, \$230,000

During Super Storm Sandy, the Mahopac Public Library did not lose power, and they were able to offer shelter, electricity, and internet access to people in Mahopac and the surrounding areas who were without power. The Mahopac library would like to acquire a generator for the library to enable them to continue to provide the same help to the public during the next storm, even if the library's power goes out. The library would like to buy a 260KW natural gas generator, which they estimate will cost – including installation – \$230,000. They would like assistance with obtaining funding for the project.

17. Village of Cold Spring, West St. Sewer Pump Station, \$200,000

Move Control Panel, Emergency Generator, Automatic Transfer Switch, 240V Electrical Service, and control wiring to new location approximately 375 feet southeast of current location. The pump station and this electrical equipment are located within feet of the Hudson River and this project will move this equipment to higher ground to prevent future flooding and damage.

18. Putnam Hospital Center, \$150,000

Because the hospital lost power for 27 hours during Superstorm Sandy, they were forced to rent a backup generator. The hospital center expects FEMA to cover their surge costs from Sandy (generator rental, staff overtime), but they're seeking \$150,000 to purchase a new generator that, in the event of another major weather event, would be able to provide power to their 3 hospitals: Putnam Hospital (165 beds); Northern Dutchess (80) and Vassar Brothers Hospital (365)

19. Putnam County, Paladin Center Emergency Staging, \$100,000

Improvements to Paladin Center to ensure effective and efficient emergency operations and delivery.

20. Putnam County, Personnel Preparedness Training, \$100,000

Provide critical training to personnel so that better equipped to handle future emergencies.

21. Town of Patterson, Town Hall Emergency Generator, \$75,000

Provide an emergency generator for Patterson Town Hall.

22. Village of Brewster, Carmel Avenue Bridge, \$50,000

The bridge is owned by Metro-North. The sidewalks are significantly deteriorated and currently closed due to holes in the sidewalks. This project would install lightweight aluminum modular walkways to cover the sidewalks on both sides of the bridge until Metro-North restores the structural integrity of the bridge.

23. Town of Patterson, Emergency Planning, \$30,000

Funding to update the Town's existing and very basic emergency response plans with updated and more comprehensive Emergency Response Plans.



ORANGE COUNTY SOIL & WATER CONSERVATION DISTRICT

225 Dolson Avenue, Suite 103, Middletown, NY 10940 PHONE: (845) 343-1873 FAX: (845) 344-1341 kevin.sumner@ocsoil.org

To: Tom Mintz

From: Kevin Sumner, Conservation District Manager

Re: Wallkill River/Black Dirt Region Flood Mitigation

Date: 2/27/2013

You have requested that we provide a preliminary estimate of costs to implement a comprehensive flood mitigation project for the Wallkill River/Black Dirt Region. As you know, we are just embarking on the preparation of a report that will guide us in the most effective use of \$2 million in NYS funding that is earmarked for flood mitigation for this Region. This report will also address long-term, comprehensive flood mitigation needs beyond that which can be accomplished with \$2 million. Unfortunately, this report is three months or more off, and we are not aware of any current document that provides any sort of comprehensive cost estimate as numerous alternative measures are still under discussion and study.

After consultation with several experienced colleagues, we decided that a reasonable preliminary cost estimate could be generated by determining the length of the main River channel and the primary tributaries that service the Region, and applying a per-foot cost to approximate the costs that can be anticipated for the various measures expected to be included in a more detailed flood mitigation plan.

Using this estimating procedure with the 26 plus miles of major waterways in the project region results in a cost estimate of \$40 million.

We anticipate that a variety of flood mitigation measures will be called for depending on the particulars of each subregion and waterway. Measures that are expected to be employed include the following.

- Channel improvements such as silt bar removal, channel widening, renovation of old channels and bank stabilization.
- 2. Floodway/floodplain improvements, including re-connection of streams/rivers with idle riparian areas, lowering of floodway areas.
- Strategic detention in upper watershed areas.
- 4. Modification/lowering of in-stream/in-river features such as rock ledges/boulder fields.
- Lowering of culverts/culvert gate structures.
- Establishment/improvement of access roads, easements, Rights-of-Way, maintenance agreements.

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- 7. Relocation/Improvement of existing dike systems.
- 8. Channel bank vegetation management.

I hope this is helpful to current efforts to identify and secure funding for this extremely important agricultural region. Please consider this our best attempt to provide a reasonable overall cost estimate for a comprehensive flood control program in advance of the more detailed report expected to be available early this summer. Feel free to contact me with any questions.